

# Pomegranate juice - 15 reasons to add it to your diet

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**Abstract.** The article discusses the main properties of pomegranate juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of pomegranate juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of pomegranate juice on the human body under certain medical conditions and diseases are analyzed separately.

Key words: pomegranate juice, useful properties, contraindications, composition, calorie content

Pomegranate has been considered one of the healthiest fruits since ancient times. Pomegranate juice contains an antioxidant that can help prevent various diseases, provide the body with beneficial elements, and improve the functioning of the gastrointestinal tract. The drink serves to prevent cancer, cardiovascular disease and improve immunity. [one]

# Composition and calories

The calorie content of pomegranate juice is low - 54 kcal per 100 grams of product. The drink is rich in vitamins and minerals. Pomegranate is a good source of vitamin E, which is a powerful antioxidant, vitamin K, which is essential for blood clotting, magnesium, which helps maintain normal glucose levels and blood pressure, and other beneficial components. [12, 13]

# **Top 15 Health Benefits of Pomegranate Juice**

#### 1. Antioxidant effect

Pomegranate contains powerful antioxidants that help reduce the levels of reactive oxygen species (such as free radicals) in the body. The body produces oxygen during various life processes. Exposure to toxins such as tobacco smoke can also increase reactive oxygen species levels.

A high level of ROS can lead to the development of various inflammatory processes. Oxidative stress can contribute to metabolic disease, cancer, and other health problems. Antioxidants help remove ROS from the body and protect it from damage. [4, 5, 10, 11, 15]

#### 2. Low calorie

The pomegranate contains few calories, so this fruit, like the drink made from it, can be consumed with various diets. [12]

#### 3. Prevention of cancer

The National Institutes of Health (NIH) lists pomegranate as a natural remedy that may help treat or prevent prostate cancer. Pomegranate fruits reduce the level of prostate specific antigen, thereby preventing tumor growth.

Pomegranate ingredients may also prevent the development of breast, lung, and skin cancers. According to the department, additional studies are currently being conducted by the American Cancer Society. [13]

#### 4. Alzheimer's disease

The ingredients in pomegranate juice may help prevent the development of Alzheimer's disease. Pomegranate helps to restore the activity of certain enzymes that play a role in the treatment of this disease. [fifteen]

# 5. Digestion

Numerous studies have repeatedly proven the benefits of pomegranate juice for people who suffer from bowel diseases.

However, it is worth noting that some people have experienced signs of diarrhea and symptoms of intestinal disease after eating pomegranate. [9]

#### 6. Inflammatory conditions

Polyphenols have anti-inflammatory and antioxidant properties. As a source of polyphenols, pomegranate is suitable for the treatment of various inflammatory conditions.

Rodent studies have shown that pomegranate extract may be beneficial for people with conditions such as:

- rheumatoid arthritis:
- intestinal diseases:
- metabolic and cardiovascular disorders. [four]

#### 7. Arthritis

Substances that contain pomegranate extract can prevent the development of osteoarthritis.

In 2016, scientists conducted clinical trials involving 38 people with osteoarthritis of the knee. Some used pomegranate juice, others did not. The test was carried out for 6 weeks. The results showed that pomegranate juice helped reduce cartilage breakdown. Participants who used it reported better performance and less stiffness than those who didn't.

Pomegranate extract may benefit people with rheumatoid arthritis due to its anti-inflammatory and antioxidant properties. <sup>[5]</sup>

#### 8. Heart disease

Pomegranate juice can help lower blood pressure levels and protect the heart and arteries. It also reduces the level of oxidative stress in the cardiovascular system and reduces the risk of:

- formation of cholesterol;
- accumulation of unhealthy fats or oxidized lipids in blood vessels;
- development of atherosclerosis. [one]

# 9. Blood pressure

It has been scientifically proven that drinking pomegranate juice daily can help lower blood pressure. [fifteen]

# 10. Antimicrobial activity

People have used pomegranate for centuries due to its antimicrobial properties. Scientists have found evidence that pomegranate has antibacterial and antiviral effects, likely due to its ellagic acid content and some tannins. <sup>[6]</sup>

Based on these findings, scientists believe it could play a big role in food preservation, including preventing Salmonella contamination. It should be noted that there is currently insufficient evidence that pomegranate can fight pathogens in humans. However, in 2021, some scientists suggested that compounds found in pomegranate seeds could help fight a mosquito-borne virus known as the Mayaro virus. [eight]

#### 11. Memory

If you drink this drink every day, memory improves significantly. Scientists conducted a study in which one group of people consumed pomegranate juice, and the other did not. After 4 weeks, those who consumed the pomegranate performed better on memory tests. [3]

#### 12. Sexual activity

Historically, people have associated the <u>pomegranate</u> with fertility and abundance. The components contained in this drink can help maintain sexual desire. Earlier studies suggest that a lack of these components can lead to sperm dysfunction in men and a decrease in libido in women.

A 2014 study showed that drinking pomegranate juice can improve sperm quality and motility. [12]

# 13. Endurance and sports results.

The compounds present in pomegranate may help improve physical performance and aid in post-workout recovery. In 2019, scientists conducted a study that found that cyclists who consumed pomegranate took significantly longer to reach the point of exhaustion than those who did not. <sup>[6]</sup>

#### 14. Diabetes

In the Middle East, pomegranate is believed to be a medicinal herb and treatment for diabetes, and some evidence supports this. The antioxidant activity of pomegranate may benefit people with type 2 diabetes. In particular, there has been evidence that the compounds found in pomegranate can help lower fasting blood glucose levels.

One pomegranate contains about 39 grams of sugar. If a person with diabetes wants to consume pomegranate juice, they should do so while maintaining their glucose levels within the range agreed with their doctor. [2,7]

# 15. Wound healing

Scientists have used pomegranate flowers and extract to heal wounds, noting a significant reduction in the size of wounds treated in this way. They also noticed that the structure of the new skin was well formed and there were few inflammatory cells in this area. [fourteen]

# Contraindications and possible harm of pomegranate juice

Despite the large number of positive properties, pomegranate juice has contraindications:

- the presence of gastritis, gastric and duodenal ulcers, pancreatitis in the acute period and chronic diseases; [16]
- tendency to constipation;
- pregnancy and lactation.

#### Recommended daily allowance

Adults can drink pomegranate juice every day. To cleanse the body of toxins, this drink is recommended to be consumed three times a week diluted with water one to one. It should be given to children diluted in a ratio of 1:3 with water. Babies under 6 months of age should not consume this drink. [17]

# Making pomegranate juice

Pomegranate juice is low in calories, so it is suitable for those who are on a diet. And in the composition with beetroot or carrot juice, it turns into a vitamin cocktail.

Pomegranate juice can be prepared using a juicer. But if you don't have it, no problem. Take a grenade, press it against the table and roll it. After that, make a small hole with a knife, insert a straw, turn it over a glass, and the juice will flow directly into the container. [12]

#### **Expert comment**

# Tatyana Eliseeva, nutritionist

Pomegranate and juice from it has undeniable benefits for the body. Its antioxidant properties may improve overall health and reduce the risk of certain diseases. But, in the presence of chronic diseases, before adding this drink to your diet, you should consult your doctor.

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